

ED

Notice of Allowability**Application No.**

10/698,615

Applicant(s)

RENGGLI ET AL.

Examiner

Ehud Gartenberg

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/3/2003.
2. ☒ The allowed claim(s) is/are 1-5, 7-12, 14-17 and 19-22.
3. ☒ The drawings filed on 03 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10/3/2003</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Reeser on 2/3/2005.

The application has been amended as follows:

Claims 6, 13, 18 are canceled.

The following claims have been amended, the underlined text has been added, the bracketed text [] has been deleted.

1. (presently amended) A method for assembling an exhaust nozzle, said method comprising:

positioning a lower structure within a substantially rectangular nozzle lower assembly, said nozzle having an exit area and a throat area;

rotatably coupling a single ramp flap within said nozzle to the lower structure;

rotatably coupling [an] a single outer flap to the nozzle assembly such that movement of the ramp flap and the outer flap adjusts the throat area of the nozzle assembly;

said outer flap comprising an external surface of said nozzle.

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8. (presently amended) A exhaust nozzle assembly comprising:

an exit area and a throat area;

a lower structure positioned within a substantially rectangular nozzle
lower assembly;

a single ramp flap rotatably coupled within said nozzle to said lower
structure; and

[an] a single outer flap rotatably coupled to said nozzle assembly, at
least one of said ramp flap and said outer flap configured to adjust a throat
area of said nozzle assembly;

said outer flap comprising an external surface of said nozzle.

15. (presently amended) A gas turbine engine comprising:

a flade rotor producing a flade discharge flow;

a substantially rectangular flade nozzle assembly configured to receive
said flade discharge airflow, said flade nozzle comprising:

an exit area and a throat area;

a lower structure positioned within said flade nozzle lower assembly;

a single ramp flap rotatably coupled within said nozzle to said lower
structure; and

[an] a single outer flap rotatably coupled to said nozzle assembly, at
least one of said ramp flap and said outer flap configured to adjust a throat
area of said flade nozzle assembly;

said outer flap comprising an external surface of said nozzle.

Claims 20-22 have been added.

20. (new) A method for assembling an exhaust nozzle, said method comprising:

- positioning a lower structure within a substantially rectangular nozzle lower assembly, said nozzle having an exit area and a throat area;
- rotatably coupling a single ramp flap within said nozzle to the lower structure;
- coupling a single outer flap to the nozzle assembly such that movement of the ramp flap and the outer flap adjusts the throat area of the nozzle assembly;
- wherein said coupling an outer flap to the nozzle assembly comprises slidably coupling the outer flap to the nozzle assembly using a plurality of tracks coupled to the nozzle assembly;
- said outer flap comprising an external surface of said nozzle.

21. (new) A exhaust nozzle assembly comprising:

- an exit area and a throat area;
- a lower structure positioned within a substantially rectangular nozzle lower assembly;
- a single ramp flap rotatably coupled within said nozzle to said lower structure; and

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a single outer flap coupled to said nozzle assembly, at least one of said ramp flap and said outer flap configured to adjust a throat area of said nozzle assembly;

a plurality of tracks coupled to said nozzle assembly, said tracks configured to slidably couple said outer flap to said nozzle assembly;

said outer flap comprising an external surface of said nozzle.

22. (new) A gas turbine engine comprising:

a flade rotor producing a flade discharge flow;

a substantially rectangular flade nozzle assembly configured to receive said flade discharge airflow, said flade nozzle comprising:

an exit area and a throat area;

a lower structure positioned within said flade nozzle lower assembly;

a single ramp flap rotatably coupled within said nozzle to said lower structure; and

a single outer flap coupled to said nozzle assembly, at least one of said ramp flap and said outer flap configured to adjust a throat area of said flade nozzle assembly;

a plurality of tracks coupled to said nozzle assembly, said tracks configured to slidably couple said outer flap to said nozzle assembly;

said outer flap comprising an external surface of said nozzle.

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Claim 3 has been amended as follows: on l. 3 of the claim "the flade" has been changed to -- a flade --.

The specification has been amended as follows:

On p. 6, l. 3, "145" has been changed to -- 142 --;

On p. 7, l. 12, "LO" has been changed to -- low observable (LO) --

Allowable Subject Matter

2. Claims 1-5, 7-12, 14-17, 19-22 are allowed.

Comment: With regard to claims 15 and 16, note that the flade throat area is different from the throat area of the flade nozzle assembly.

Conclusion

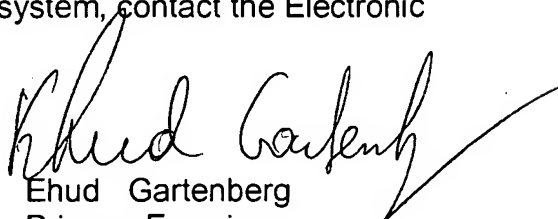
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Justice 6000635, Wooten 4280660, Nash 5016818, Meyer 5261604, MacLean 4978071, Szuminski 4739932, Enderle 5186390.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehud Gartenberg whose telephone number is 571 272 4828. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571 272 4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ehud Gartenberg
Primary Examiner
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